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Zeev Maor

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EXAMINER

FRAZIER, BARBARA S

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/519,387	Applicant(s) MAOR ET AL.	
	Examiner BARBARA FRAZIER	Art Unit 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) 2,4,13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-9,11,12 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/19/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 1-9 and 11-15 are pending in this application. Cancellation of claim 10 and addition of new claim 15 are acknowledged.
2. Claims 2, 4, 13, and 14 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/20/07.
3. Claims 1, 3, 5-12, and 15 are examined.

Claim Rejections - 35 USC § 103

4. The rejection of claims 1, 3, 5-8, 10, and 12 under 35 U.S.C. 103(a) as being unpatentable over Zastrow et al (US Patent 5,961,988) is withdrawn in view of Applicant's amendment to claim 1.
5. The rejection of claims 1 and 11 under 35 U.S.C. 103(a) as being unpatentable over Zastrow '988 (US Patent 5,961,988) as applied to claims 1, 3, 5-8, 10, and 12 above, and further in view of Chittofrati et al (EP 0686447) is withdrawn in view of Applicant's amendment to claim 1.
6. The rejection of claims 1, 3, and 5-10 under 35 U.S.C. 103(a) as being unpatentable over Zastrow et al (US Patent 5,800,835) is withdrawn in view of Applicant's amendment to claim 1.

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7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1, 3, 5-9, 12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maor et al (WO 00/40255) in view of Zastrow et al (US Patent 5,961,988), or alternatively Zastrow et al (US Patent 5,961,988) in view of Maor et al (WO 00/40255).

The claimed invention is drawn to cosmetic compositions comprising (a) nanomagnetic particles which have a magnetic field and are configured to be topically administered on skin; and (b) a member selected from Dead Sea salts, Dead Sea minerals, and mixtures thereof.

Maor et al teach a pharmaceutical cream composition for topical application for the treatment of skin disorders and skin diseases, comprising Dead Sea Mud as an active ingredient (abstract), which contains Dead Sea minerals (pages 4 and 5) and evidenced by Applicant's specification (see page 6 and claim 15 of Applicant's disclosure).

Maor et al do not teach the presences of nanomagnetic particles.

Zastrow et al teach a dermatological preparation containing magnetically hard particles such as strontium hexaferrite (col. 1, lines 37-39) which may be used in an emulsion/cream (for example, see col. 3, lines 23-24, Example 1C, and Example 2). The magnetic particles have a particle size in the range of 80 to 550 nm (col. 1, lines 41-42), and thus are "nanomagnetic particles". The magnetic particles have a high

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wound healing effect and anti-inflammatory effect (col. 1, lines 22-23) and are useful for hypersensitive skin (Example 2).

Zastrow et al do not teach the presence of Dead Sea salts or minerals.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the Dead Sea mud cream taught by Maor et al with the magnetic particles taught by Zastrow et al; thus arriving at the claimed invention.

One skilled in the art would have been motivated to add the magnetic particles taught by Zastrow et al to the Dead Sea mud cream taught by Maor et al, because the addition of the magnetic particles provides the benefits of high wound healing effect and anti-inflammatory effect, as well as treatment of hypersensitive skin, as taught by Zastrow et al. Alternatively, one skilled in the art would have been motivated to add the Dead Sea mud cream taught by Maor et al to the magnetic particles taught by Zastrow et al, because the addition of the Dead Sea mud provides the benefits of increased therapeutic properties for treating skin disorders, as well as beautifying and enhancing skin appearance, as taught by Maor et al (see pages 1 and 3). One would reasonably expect success from the combination of the of the Dead Sea mud cream taught by Maor et al with the magnetic particles taught by Zastrow et al, because both references are drawn to cosmetic compositions in the form of emulsion/creams for the treatment of skin disorders.

Regarding claim 3, Applicants have elected strontium hexaferrite as the elected species for the nanomagnetic particles. Zastrow et al teach strontium hexaferrite as the magnetic particles (col. 1, lines 37-39).

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Regarding the form of the composition (claims 5 and 6), Maor et al teach that the compositions are cream /emulsion compositions including milk, lotion, cream, and ointment (page 2). Zastrow et al teach that the compositions are in emulsion, cream, and ointment form (see Examples 1, 2, and 4).

Regarding claim 7, Zastrow et al teach that an emulsion base is added to the magnetically hard particles (see Example 1C, col. 5, lines 15-18). Based on this description, one skilled in the art would recognize that the magnetic particles would be solubilized, dispersed or suspended in the emulsion.

Regarding claim 8, Maor et al teach that odorants such as fragrance may be present (Table 1, page 6), Zastrow et al teach that cosmetic active ingredients, such as vitamins, may be present (col. 3, lines 13-16).

Regarding claim 9, Zastrow et al teach that an emulsion base may be added to form the emulsion (col. 5, lines 15-18), Maor et al teach that dimethicone (a polyalkyl siloxane) may be present in the cream. Therefore, one skilled in the art would reasonably expect that dimethicone may be used as the emulsion base into which the magnetic particles are suspended.

Regarding claim 12, Zastrow et al teach that the magnetic particles have a particle size in the range of 80 to 550 nm. This would, therefore, classify them as “nano-magnetic particles”. Furthermore, the size range cited in Zastrow ‘988 overlaps with the size range described in claim 12 of the claimed invention, and one skilled in the art would have be motivated to select an optimal size for the magnetic particles from

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within said ranges by routine experimentation, in order to optimize the wound healing and anti-inflammatory properties of the magnetic particles.

Regarding claim 15, Maor et al teach that Dead Sea mineral mud is present in the composition (abstract).

9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maor et al (WO 00/40255) in view of Zastrow et al (US Patent 5,961,988), or alternatively Zastrow et al (US Patent 5,961,988) in view of Maor et al (WO 00/40255) as applied to claims 1, 3, 5-10, 12, and 15 above, and further in view of Chittofrati et al (EP 0686447).

Claim 11 of the claimed invention is drawn to the cosmetic compositions according to claim 1, wherein the nano-magnetic particles range from 2 to 20 nm in maximum diameter.

The invention of the combined references is delineated above (paragraph 8).

The invention of the combined references does not teach that the nano-magnetic particles range from 2 to 20 nm in maximum diameter.

Chittofrati et al teach a process for the preparation of mixed ultrafine particles having particle size that is preferably lower than 10 nm (page 2, lines 1-3). The particles may be magnetic ferrites having valence (II) (which would include strontium); barium is cited as an example (page 4, lines 32-38). Chittofrati et al also teach that, in the case of cosmetics, "the small size and the particles uniformity are favourable characteristics for the homogeneity of the formulations and for the dispersibility of the

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powder in the various liquids wherein it must be used under the form of uniform dispersion" (page 2, lines 15-18).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to form the composition of the invention of the combined references with magnetic particles with the particle range of 2 to 20 nm; thus arriving at the claimed invention. One skilled in the art would be motivated to manipulate the size of the magnetic particles so that the size is less than 10 nm because doing so provides the benefits of homogeneity of the formulation and dispersibility of the powder, as taught by Chittofrati et al. Additionally, the range taught by Chittofrati et al (less than 10 nm) overlaps that of the claimed invention, and one skilled in the art would be motivated to select an optimal size from within said ranges by routine experimentation, in order to optimize the homogeneity of the formulation and dispersibility of the powder.

Furthermore, Zastrow et al teach that barium hexaferrite (cited by Chittofrati et al) and strontium hexaferrite are functional equivalents of each other, such that one could be substituted for the other (see col. 1, lines 37-39). Therefore, it would have been obvious at the time the invention was made to use ultrafine magnetic particles made by the process of Chittofrati et al. in the composition of the invention of the combined references, with a reasonable expectation of success.

Response to Declaration

10. Applicant's Declaration filed 6/19/08 has been fully considered but is not persuasive for overcoming the rejections.

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The Declaration is not persuasive because the results obtained from the combination of DerMud and strontium hexaferrite versus DerMud alone would not be unexpected. Since DerMud is known to provide relief for skin diseases and disorders (see abstract of Maor et al), and strontium hexaferrite is known to have a wound healing effect and be useful for treating hypersensitive skin (see Example 2 of Zastrow et al), the skilled artisan would reasonably expect that the combination of DerMud and strontium hexaferrite would show greater efficacy than either component by itself. Therefore, the Declaration merely illustrates what would reasonably be expected by one skilled in the art at the time the invention was made, and does not represent a patentable distinction or improvement over the prior art.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA FRAZIER whose telephone number is (571)270-3496. The examiner can normally be reached on Monday-Thursday 9am-4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached on (571)272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BSF

/Sharmila Gollamudi Landau/

Supervisory Patent Examiner, Art Unit 1611